Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20555

In the Matter of	)	
	)	
Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies	)	WT Docket No. 16-421
	)	
Mobilitie, LLC Petition for Declaratory Ruling	)	

REPLY COMMENTS OF NEO NETWORK DEVELOPMENT INC ("Neo")

NEO files these Reply Comments in response to the Commission's Request for Comment on Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities Siting Policies and Mobilitie, LLC's Petition for Declaratory Ruling. In the initial public comment, Neo had indicated that they would provide an outline of a Best Practices based Siting Policy, included here as Exhibit A.

PROPOSED ELEMENTS FOR BEST PRACTICES GUIDE

1. **KEY TO IMPLEMENTING BEST PRACTICES:** The Commission should consider endorsement and development of a Master Lease and License process governing wireless access points, DAS, small cells, mid-cells and lateral facilities (Fiber) attachments on existing utility poles, Proprietary Community Property (street lights or traffic signal poles[1]), the placement of new poles owned by the Community, a Public, Private Partner (P3) or by

[1] The author presumes that Street Lights and Traffic Signal Poles are exempt by definition from C.F.R 47 subsection 1.40001 as "Proprietary Community Property" and therefore, the Commission would likely forebear on rate setting or imposing mandates requiring communities to make these structures available, however it would be within the Commission's authority to incentivize communities who include these structures as a function of their siting policy and adopt commercially reasonable rates and requirements.

properly entitled Regulated Utilities and Certificated Wireless Carriers including the local electric utility, wireless (CMRS) and Regulated Telecommunications Utilities (ILEC and CLEC). This "MLA" would be made available to Communities at no cost and would ensure local PROW management, Access and Use policies originate and remain in compliance with Commission rules, regulations, current and subsequent laws and orders. TABLE A below represents an outline of the Infrastructure, Conditions, Proposed Process (Including Duration) general Fee Structure. If properly architected, a Commission approved program would encapsulate all facilities and forms of Infrastructure placed within the PROW that would ideally include:

- **Existing Utility Poles**
- **Existing Street Lights and Traffic Signal Poles**
- **New, Community Owned Poles**
- **Public Private Partnerships (P3)**
- **New Poles Placed by Regulated Public Utilities and Certificated Carriers**

2. **MATERIAL BENEFITS**: Development of a Commission endorsed Program that includes Commission pole attachment and rental rate maximums would benefit the Commission, the Communities and the Carriers while accelerating the deployment of wireless, broadband and all forms of advanced and emerging technologies. TABLE 2 below outlines a number of Limiters, Description in brief and a preliminary Recommendation. The primary benefits are listed below.

    - Establishes consistent and manageable timeframes to review and approve right of way access applications.
    - Functionally eliminates protracted negotiations on business terms through the establishment of clear and consistent values associated with pole rental rate maximums and pole attachment fees.

- Rate setting vehicle that establishes dollar values, eliminate ambiguities and common misinterpretations of the definition of “cost recovery”.
- Equipment dimension based rental rate adjustment that incentivizes applicants and their equipment manufacturers to minimize the size and dimensions of the equipment and antenna systems in exchange for reduced rents and attachment fees and minimizes the aesthetic impact on the local Community.
- Minimizes or obviates the risk of costly litigation by providing sensible PROW management governance and the installment of and effective and efficient, expedited dispute mediation and resolution.
- Prioritizes the use of existing vertical infrastructure while providing an order of precedence for the placement of new poles owned by the community, community partners and regulated public utilities and properly certificated carriers.
- Includes a mechanism that encourages the use of Proprietary Community Property under commercially reasonable rates, business terms and conditions that allows the applicant to deduct the cost of pole and foundation upgrades and replacements from the attachment fee or pole rent until the cost of tenant improvements are recovered.
- Minimizes the proliferation of new poles by including a process that encourages the use of existing poles and vertical infrastructure and enables the placement of new poles including within urbanized areas where utility poles have been removed and overhead utilities have been placed underground.
- Enables Communities to generate a nominal, “rent controlled” cumulative recurring revenue stream from their owned assets, community partners’ installed inventory and inventory of existing poles as a matter of Community choice.

- Allows for placement of new poles and vertical infrastructure in Communities where existing vertical infrastructure is limited or where the local Community chooses not to make their existing (non-utility) infrastructure available commercially.
- Streamlines the leasing and licensing of poles through the adoption of a standardized lease / license template that is offered to all carriers on a competitively neutral and non-discriminatory basis.
- Accelerates the applicants' zoning and planning approvals and dramatically reduces the time to market, cost of site acquisition, network deployment and construction.
- Eliminates ambiguities, common misinterpretations and imposition of excessive, arbitrary and anti-competitive fees and charges, unenforceable and unlawful restrictions and other significant barriers to entry through the enforcement and inclusion of Commission imposed, legal mandates specific to the occupation and use of the public and utility rights of way and regulated infrastructure.

3. **ATTACHING TO EXISTING UTILITY POLES:** The Commission should consider imposing a simple administrative review process for securing approval to attach on existing utility distribution poles not to exceed 30 days from the submission date. Communities should be encouraged to adopt a "Utility Poles First" policy to ensure the maximum utilization of existing utility owned infrastructure for the hosting of facilities, equipment and antenna systems to support all wireless, advanced and emerging technologies. Excepting only Municipal Owned Utilities, Communities rarely have an ownership interest in utility infrastructure and therefore would not be entitled to any form of recurring pole attachment fees or pole rents and would be limited only to cost recovery based, non-recurring application and permit fees and a nominal, annual ROW maintenance and inspection fee, the maximum values of which would be established by the Commission. (See table 1 below).

4. **PROPRIETARY COMMUNITY PROPERTY:** As an incentive to communities that make their existing assets and inventory available at "commercially reasonable" rates, establish attachment fees (or pole rents) based upon a cost recovery based fee structure, the Commission should consider offering communities relief from the requirement to allow the placement of new poles as an enticement to communities that opt into or adopt the Commission's Siting Policy that includes commercially reasonable access to Proprietary Community Property. The integration of a Best Practices based policy that encourages the use of existing assets and inventory of poles would benefit the community by introducing a moderate, cumulative, recurring revenue stream while minimizing the proliferation of new poles in the PROW, benefits the carriers by enabling low cost, high velocity approval and high volume placement of network equipment on existing vertical infrastructure while minimizing the initial capital cost and ongoing liability that accompanies pole ownership. (**Note:** Similar to tower ownership, CMRS (wireless) carriers have demonstrated over time, a preference of leasing or licensing access as opposed to owning traditional cell towers with most, having sold off their portfolios and are currently leasing space on towers that they once owned and this trend is presumed to apply here to existing and new poles placed in the PROW). The fee structure would include a non-recurring, cost recovery based application fee that includes the cost of all required permits and an annual pole rent, not to exceed the pole rental maximums to be established by the Commission.

    a. For those municipalities and government agencies that adhere to the Commission rental rate maximums, applications from properly certificated and regulated carriers (without regard to specific form of entitlements) to place new poles may only be denied under certain, specific conditions (equivalent heights, distance from coverage objectives, imposition of cost prohibitive upgrades and improvements and other technology specific limitations that can qualify the use of existing infrastructure as cost prohibitive or technologically non-viable).

b. For those municipalities and government agencies that choose (i) to not make their existing infrastructure available for commercial use or (ii) require rental payments that exceed the Commission rental rate maximums, these municipalities and government agencies would be subject to a Commission imposed administrative review and approval of new poles, including equipment and antenna systems within certain, specific timeframes (i.e. 60 days) or the FCC may be petitioned to preempt local municipal or government administration over access to or use of the public and utility rights of way under expedited (i.e. 30 day) mediation and dispute resolution proceedings.

5. **BEST PRACTICES INVOLVING NEW POLE PLACEMENT**: Best practices are needed to address this highly contentious issue for municipalities and government agencies and routinely delays the deployment of entire networks, even in instances where only a small percentage of locations in any given network require new, standard height pole. The most common catalysts for delay centers around (i) pole owner policies that limit the use of existing utility poles, (ii) utility poles either do not exist or have been previously been removed as utility services (electric lines, CATV and Telecom) have been placed underground, (iii) existing inventory of street lights, traffic signal poles or related Proprietary Community Property are not approved for use, not made commercially available or are already in use and are not suitable for collocation, (iv) the combined cost of capital improvements (i.e. pole and foundation replacements, road restoration, mandatory civil infrastructure improvements) and pole rents are economically non-viable (v) community concerns over possible public opposition, (v) the communities lack of a lawfully compliant siting policy, (vi) communities lack staff, budget, resources needed to implement an effective and compliant siting policy (vii) lack of specificity on the dollar values of a commercially appropriate rate structure. Solutions and best practices may include:

- **New Community Owned Poles**: Under a cost recovery based rate structure, the local community would place, own and license or lease new poles to the entity requesting

access. Under a variable rate model that allows the attaching party to contribute capital in exchange for lower rent and a cost recovery based rate formula limited to and in compliance with the Commissions rental rate maximums.

- **Public Private Partnership (P3) Agreement**: Established by private agreement (P3 or management and marketing agreement), the Community would identify a preferred partner(s) willing to accept ownership, liability and responsibility for the placement of new poles and the ongoing maintenance, operation and administration of access under a collocation preference.
- **Third Party Placement of New Poles**: To the extent (i) existing utility poles are not usable or available, (ii) proprietary community property inventory is not available or are not made available commercially, (iii) the community chooses not to place, own and license / lease new poles, (iv) a preferred P3 partner has not been identified or (v) the applicant seeking permission to place new poles can qualify why options (i) through (iv) are technically, economically or operationally non-viable, an abbreviated process (i.e. 60 to 90 days) to allow the placement of new poles by properly certificated and entitled entities would be supported by the Commission.

(**Note:** ***Since Mobilitie had applied to place new poles as a Regulated Public Utility,*** including their 120' tall poles, many Communities are likely resisting or refusing their applications due to the presumption that (i) ***120' tall poles are not eligible facilities*** since they exceed the standard height of a common utility pole and (ii) ***Communities assume Mobilitie intends to generate significant, recurring pole rents and attachment fee revenues beyond a cost recovery based rate formula*** and (iii) ***120' poles are not safe when installed within the public way***.)

6. **EQUIPMENT DIMENSION BASED POLE RENTS AND ATTACHMENT FEES**: Best practices should be developed to encourage placement of equipment using a compact

and visually unobtrusive profile. In other words, the smaller the equipment and antenna systems are, the lower the pole rent or attachment fee. Since many network architectures such as Wi Fi access points and Gigabit Ethernet radios involve ultra-low or low power devices, the equipment dimensions are generally smaller than higher power microcells, DAS nodes or remote radios. The trade-off is that lower power equipment requires more devices and a larger number of sites and higher radio density. By providing a mechanism for several different equipment dimensions, each carrier intending to attach their equipment will have the choice of low power, high density at a lower attachment fee or higher power, lower density at a higher attachment fee. Implementing an equipment and antenna dimension based fee structure provides each carrier with the maximum flexibility to select the equipment and antenna system best suited to their preferred technology while providing a competitively neutral method of establishing rates that encourages the placement of small form factor equipment and minimal visual impact to the community.

7. **LATERAL FACILITIES (fiber, copper, hybrid fiber and coaxial ("HFC") and coaxial cables):** Best practices for the planning, permitting and administration of access to and use of the PROW for both overhead (aerial) and underground facilities include the unification of the process and consistency in administration at the local government or agency level, without regard to the differences in entitlements (CMRS, ILEC, CLEC, CATV) and rate structure differences that result combined with an equitable rate structure that includes standardized values, collocation and wholesaler incentives.

    - **Planning, permitting and administration of overhead and underground lateral facilities and Right of Way ("ROW") Permits**: While the fees and charges may not be identical, the process of securing access should be applied consistently among carriers in possession of all the various forms of entitlements provided the applicant(s) possess an appropriate form of full, facilities based authority.

Theoretically, there should be no discernable differences in or dissimilar treatment of:

i. The timing or cost of administration and processing of right of way use applications
ii. Approval and issuance of ROW Permits simply on the basis of carrier classification.
iii. Applications submitted to utility pole owners in the processing of occupancy permits, the treatment and processing of make ready engineering or the timing of the performance and completion of rearrangements of existing telecommunications attachments
iv. Annual cost and payment of attachment fees or pole rents from any eligible carrier providing any qualifiable telecommunication service regardless of their "functional equivalency" or the classification of their regulatory status
v. Local process that mandates that any given applicant be required to place their lateral facilities underground while others are allowed to attach overhead.

- **Equalize treatment of all carriers' rights of access:** In many States, treatment of CMRS carriers and CLEC's are not equal. In some cases, CMRS carriers are provided access to the PROW to place lateral facilities without needing to endure costly and time consuming environmental impact reports and advance approvals, while CLEC's are required to secure Environmental Impact Reports or Mitigated Negative Declarations with Notice to Process in advance of ground disturbing construction while (dominant) ILEC's and CATV file post construction. Inversely, CLEC's generally are afforded tariff based rate treatment on infrastructure owned by Public Utilities while CMRS carriers are required to pay commercial, market based rates to host their equipment and antenna systems. In markets across the US, CATV

providers are installing hundreds of thousands of Wi Fi access points on poles and on their existing fiber optic cable strands without needing to endure any formal, public process while WISP's, CLEC's, CMRS carriers are subjected to any number of local, municipal processes and approvals when attempting to place equipment of similar function, weight and dimensions and many States continue to exclude (both CMRS and CLEC owned) Antenna's from State Law and local siting policy in contradiction with Federal Law's, FCC rules and orders.

CONCLUSION

The outline provided by Neo Networks is intended to offer collaborative and rational input in order to facilitate all wireless and broadband deployments in a meaningful and impactful way that benefits the industry and their stakeholders as well as putting forth some concepts that would allow the local Community to retain their role as trustees over occupation and use of the public and utility rights of way and offer a form of safe harbor protection from Federal preemption.

We applaud the Commission in their continued effort to eliminate barriers to entry that are currently limiting wireless and broadband deployments and offer our continued support and assistance in that regard.

Respectfully submitted,

/s/ Vince Aragona

Vince Aragona, Chief Executive Officer

TABLE 1

Infrastructure	Conditions	Process	Fees
Existing Utility Poles	Subject to agreement with and receipt of occupancy permit from the utility pole owner and local building, electrical and traffic control permits.	30 day administrative review and approval process (encroachment permit) that includes an option for securing ground space to host equipment cabinets for those carriers whose equipment dimensions or weight cannot be accommodated on the pole or whose installation on the pole would otherwise require a new pole or pole replacement.	Non-recurring, cost recovery based permit fee paid to the local municipality or government agency with discretionary authority and a cost recovery or tariff based rate paid by the applicant, directly to the utility pole owner in compliance with FCC rules and orders.
Infrastructure	**Conditions**	**Process**	**Fees**
Proprietary Community Property (Street Lights and Traffic Signals)	Subject to execution of a lawfully compliant, Master Lease or License Agreement, submission and approval of attachment applications or encroachment permit, site plan approval, structural analysis, receipt of local building, electrical and traffic control permits, required insurance and indemnification.	60 day review and approval of a completed Site Supplement that is incorporated into the Master Lease or License Agreement by reference. Site suppliment to include a Compliance Statement certifying that existing utility poles are not available.	Non-recurring application fee (refundable if the site is not approved) paid to the pole owner plus an annual pole rental or attachment fee not to exceed the pole rental or attachment fee maximum rates to be established by the Commission.

TABLE 2

Infrastructure	Conditions	Process	Fees
New Community Owned Poles	Subject to execution of a lawfully compliant, Master Lease or License Agreement, submission and approval of attachment applications or encroachment permit, site plan approval, structural analysis, receipt of local building, electrical and traffic control permits, required insurance and indemnification.	60 day review and approval of a completed Site Supplement that is incorporated into the Master Lease or License Agreement by reference. Site suppliment to include a Compliance Statement certifying that existing utility poles and existing proprietary community properties are not available.	Non-recurring application fee (refundable if the site is not approved) plus a capital contribution of up to 100% of the cost of the new pole plus an annual pole rental or attachment fee not to exceed the pole rental or attachment fee maximum rates to be established by the Commission. Post transaction, the Community becomes the pole owner of record.
Infrastructure	**Conditions**	**Process**	**Fees**
Public Private Partnership (P3)	Subject to execution of a lawfully compliant, Master Lease or License Agreement, submission and approval of attachment applications or encroachment permit, site plan approval, structural analysis, receipt of local building, electrical and traffic control permits, required insurance and indemnification. Public Private Partnerships may include both Regulated entities and non-regulated entitles from within the private sector.	60 day review and approval of a completed Site Supplement that is incorporated into the Master Lease or License Agreement by reference. Site suppliment to include a Compliance Statement certifying that existing utility poles and existing proprietary community properties and new community owned poles are not available.	Non-recurring application fee (refundable if the site is not approved) plus a capital contribution of up to 100% of the cost of the new pole plus an annual pole rental or attachment fee not to exceed the pole rental or attachment fee maximum rates to be established by the Commission. Post transaction, the P3 partner becomes the pole owner of record.
Infrastructure	**Conditions**	**Process**	**Fees**
Third Party Carrier Placement of New Poles	Subject to execution of a lawfully compliant, Master Lease or License Agreement, submission and approval of attachment applications or encroachment permit, site plan approval, structural analysis, receipt of local building, electrical and traffic control permits, required insurance and indemnification. Third party pole owner requires State certification as a Regulated Telecommunications (ILEC, CLEC), Commercial Mobile Radio Services (CMRS i.e. wireless carrier) or other qualifyable form of regulatory entitlements as a facilities based services provider.	90 day review and approval of a completed Site Supplement that is incorporated into the Master Lease or License Agreement by reference. Site suppliment to include a Compliance Statement certifying that existing utility poles, existing proprietary community properties, new community owned poles are not available and pole placement through a P3 partner is non-viable.	Non-recurring application fee (refundable if the site is not approved) plus an annual right of way maintenance and inspection fee not to exceed the ROW maintenance and inspection fees paid to the Community in compliance with rates to be established by the Commission. Post transaction, the properly certificated carrier (CLEC, CMRS, CATV etc.) becomes the pole owner of record. As a function of securing right of way access by Regulatory Entitlement, the pole owner would be relegated to compliance with Commission rules relating to adoption of a cost recovery based pole attachment fees not to exceed the pole rental or attachment fee maximum rates to be established by the Commission and mandatory collocation of additional third party attachments. Post transaction, the Regulated Third Party becomes the pole owner of record.

Limiter	Description	Recommendation
Blanket prohibitions on placement of antennas from local siting policy	Many States, Municipalities and local Communitiies continue to prohibit the placement of antennas in order to qualify DAS and small cell installations and right of way applications are administered under wireless siting policy.	Commission order that deems prohibitions of antennas from inclusion in right of way siting policy as unlawful and unenforcable.
Local conditions that require civil upgrades to Community infrastructure that are not directly related to the proposed network	Municipalities and Communities routinely impose local conditions and requirements on right of way applicants that require the applicant to independantly pay for curb to curb road restoration, installation of ADA wheelchair ramps (in many cases, on all four corners of the intersection), requirements to place lateral facilities underground including in areas where otherwise usable utility poles remain in place.	Commission order that eliminates local authorities ability to impose civil improvements as a condition of approval combined with expedited dispute and resolution process for case by case review.
Unlawful annual fees and charges imposed on carriers for lateral access to and use of the public and utility rights of way for the placement of fiber, copper and conduit systems	Nationally State Government, Municipalities and Transportation Agencies are imposing annual recurring fees and charges on newly installed lateral facilities both underground and overhead. Often referred to as Right of Way Use Fees or Air Space Review Fees, these locally imposed fees represent a significant barrier to entry for new entrants.	Commission established rate structure including maximum allowable values on annual fees and charges imposed on lateral facilities.
Minimum annual (franchise) fees and revenue based fees.	Gauranteed annual minimum franchise and right of way use fees or revenue based fee structures create barriers to entry for new entrants and emerging technologies while revenue based annual fees functionally eliminate wireless carriers from participating directly.	Generally, dominant ILEC's pay no annual fees for the placement of their facilities and CATV providers pay revenue based franchise fees directly to the local community. The imposition of annual minimums on new entrants, while excluding the incumbants or the requirement to pay a revenue based fee for wireless or mobile services providers should be deemed unlawful and unenforcable by the Commission or, should the COmmission determine an annual fee is appropriate, establish the value and method of calculation of the fee to ensure it's
Proprietary Community Property (Street Lights and Traffic Signal Pole) Replacements and Foundation Upgrades	Similar to utility poles, many communities require the applicant to pay for the entire cost of replacing poles and upgrading or replacement of the foundation as a condition of approval. In addition, pole rents and attachment fees are charged without offset or deduction of the associated cost. The combination of pole replacements and foundation upgrades and replacements plus the pole rents and attachment fees result in delay or discontinuation of the proposed site or project due to the economics being non-viable or an increase in cost often exceeding 5 to 10 times more than the cost of a new pole.	As a component of the Commission pole rental and attachment fee maximum rate structure, all reasonable and qualifiable cost of the pole replacement and foundation upgrades or replacment, i.e. tenant improvements, should be deducted from the pole rents or attachment fee until the costs are recovered by the applicant. This would allow the Community to determine if the revenue or the improvement to the infrastructure is more valuable while remaining in compliance with the

TABLE 3

Limiter	Description	Recommendation
Blanket prohibitions limiting the use of existing utility poles and pole tops	Nationally, electric utilities have implemented policy changes that effectively eliminate the use of existing utility poles. Common prohibitions include placement of electric meters on utility poles, antenna placement above primary power (pole top), use of tangent poles, use of poles with existing conduits, use of poles with primary power, use of poles with existing transformers or switchgear and other arbitrary and unqualified restrictions that functionally eliminate large percentages of otherwise usable utility poles.	Commission order that requires electric utilities and utility pole owners to comply with National Electric Code, National Electric Safety Code and secure Commission approval prior to the adoption of policy that prohibit or have the effect of prohibiting the use of existing utility infrastructure. When accompanited by a Commission sanctioned safety policy, advisory review board and expedited dispute resolution, the inventory of usable utility poles would increase geometrically.
Excessive Numbers of Utility Pole Replacements	Utility poles hosting lateral facilities attachments or equipment and antenna systems are being required to be replace disproportionate number of poles as a condition of approval. Commonly referred to as "Gold Plating", the requirement to pay to replace existing utility poles due to calculated loading. The calculus used to produce these calculations are not consistant nationally and changing pass / fail criteria are routinely resulting in increasingly larger percentages of poles indicating a structrural failure that would otherwise be eligable for use. Due to the cost of pole replacements and facility transfers and time involved in the scheduleing and performance of the work, pole replacements have effectively prohibited entry of several competitive providers in markets throughout the US.	Commission to impose a cost sharing requirement that includes proportionate percentages of the replacement cost be shared by the electric utility, owners of existing attachments and the newly attaching party. Under a manadatory cost sharing arrangement, significant percentages of poles that are slated for replacement will be minimized as structural analysis and pole carrying capacity calculations revisited. Minimally, the cost of pole replacement paid by the newly attaching party should be deducted from the annual attachment fee until such time as the cost has been recovered.
Easements Over or Under Railroad Crossings	Nationally, private companies and railroad operators have imposed what can only be characterized as ridiculously excessive fees and charges for the placement of lateral facilities over or under railroad rights of way. These fees represent a siginficant barrier to entry and routinely result in massive cost overruns or a lack of continuity of constructed networks.	The Commission should review the conditions by which the original railroad rights of way were granted and ideally, eliminate or tarriff the rate the railroads or their agents charge for the grant of easement. Since in most cases, the original railroad easements were granted prior to the invention of telecommunications services, it is unlikely the railroad easement or their ability to generate revenue was contemplated at that time and therefore, their eligability to impose a fee may be obviated.